





An Daras Multi Academy Trust

St Stephens Community Academy

Curriculum Scheme of Learning - Computing and E Safety

Integrated Curriculum Scheme of Learning - 2015	
Domain of Learning:	Computing
National Curriculum Subjects:	Computing
Domain Leader:	R. Hudson
Agreed and Approved:	Sept 15
Next Leader Review:	Sept 16
Related Documents and Guidance:	National Curriculum 14
	Dimensions Skill Ladders 14
	SSCA Non-Negotiable 14
	SSCA E Safety and Computing Policy 15
	SSCA Computing Curriculum Statement 15
	SSCA Child Protection and Safeguarding Policy 15

St Stephens Community Academy

Computing and E-safety *Scheme of Learning – 2015*

Curriculum Statement

At St Stephens Community Academy we believe that computing is an essential part of the national curriculum. Computing is an integral part of modern day life and therefore provides a wealth of learning opportunities, explicitly within computing and also across other curriculum subjects. Through the study of computing, children are able to develop a wide range of fundamental skills, knowledge and understanding that they will need for the rest of their lives. Computers have become a part of everyday life. For most of us, technology is essential to our daily lives, at home and at work. 'Computational thinking' is a skill children must be taught in order to provide them with essential knowledge and skills that will enable them to participate effectively in the digital world.

The new national curriculum defines three clear aspects of the computing curriculum:

- 1. Computer Science (CS),
- 2. Information Technology (IT)
- 3. Digital Literacy (DL).

The aims of teaching Computing, as outlined in the National Curriculum are to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology

In **Key Stage 1** the children will be taught to:

- understand what *algorithms* are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- to create and *debug* simple programs and use logical reasoning to predict the behaviour of simple programs.
- use a range of technology purposefully
- create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school.
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

In **Key Stage 2** the children will:

- design, write and *debug* programs that accomplish specific goals, including controlling or simulating physical systems;
- solve problems by decomposing them into smaller parts.
- use sequence, selection, and repetition in programs, use logical reasoning to explain how some simple *algorithms* work and correct errors in algorithms and programs.
- be taught to understand computer networks, including the internet, and the opportunities they offer for communication and collaboration.
- use search technologies effectively, learn to appreciate how results are selected and ranked, and be discerning in evaluating digital content.
- be taught to select, use and combine a variety of software (including internet services) on a range of digital devices to create a range of programs, systems and content that accomplish given goals.
- use technology safely, respectfully and responsibly; recognise acceptable /unacceptable behaviour; identify a range of ways to report concerns about content and contact.

St Stephens Community Academy

Computing and E-safety *Scheme of Learning – 2015*

Year Group	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
1 – Unit Title	We are Treasure Hunters – Using programmable toys	We are TV Chefs – Filming the steps of a recipe	We are Painters – Illustrating an eBook	We are Collectors – Finding images using the web	We are Storytellers – Producing a talking book	We are Celebrating – Creating a card digitally
A. Nat Curriculum 14	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Create and debug simple programs Use logical reasoning to predict the behaviour of simple programs Recognise common uses of information technology beyond school	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of information technology beyond school Use logical reasoning to predict the behaviour of simple programs	Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of information technology beyond school Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Use technology purposefully to create, organise, store, manipulate and retrieve digital content Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Recognise common uses of information technology beyond school	Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of information technology beyond school Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of information technology beyond school Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

B. Academy Aims Link	Accelerating and sustaining	Ensuring achievement gaps	Ensuring children are	Ensuring children are	Creating an enjoyable and	Creating an enjoyable and
 SSCA 	children's progress towards	for disadvantaged children	equipped for the next	equipped for the next	creative curriculum that	creative curriculum that
• ADMAT	higher achievement.	are addressed.	phase of learning.	phase of learning.	meets the learning needs of children.	meets the learning needs of children.
	Creating an enjoyable and creative curriculum that meets the learning needs of children. Ensuring achievement gaps for disadvantaged children are addressed. Skilled – to have learning skills for the modern world.	Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Skilled – to have learning skills for the modern world. Safe and Strong – to have a healthy body and mind.	Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Skilled – to have learning skills for the modern world. Safe and Strong – to have a healthy body and mind.	Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Skilled – to have learning skills for the modern world. Safe and Strong – to have a healthy body and mind	Accelerating and sustaining children's progress towards higher achievement. Providing for children a safe, stimulating, caring but challenging learning environment. Skilled – to have learning skills for the modern world. Safe and Strong – to have a healthy body and mind.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Skilled – to have learning skills for the modern world.
C. Scheme Reference Rising Stars ' Switched on Computing'	Programming	Computational Thinking	Creativity	Computer Network	Communication and Collaboration	Productivity
D. Key Knowledge	Understand algorithms Create simple programs	Use technology purposefully to create digital content Recognise common uses of technology beyond school	Use technology purposefully to create digital content	Use technology safely and respectfully Recognise common uses of technology beyond school	Use technology purposefully to organise and store digital content	Use technology purposefully to organise and store digital content
E. Key Skills and Understanding Ref: The Saints Way: Church of England MAT	I can use a range of programmable toys, Beebot, cars etc I can create a simple program. I can describe an algorithm in simple terms. I can programme a simple programmable toy, e.g. Move the Beebot backwards and forwards.	I can use ICT to generate, amend and record my work. I can use simple interactive computer programs.	I can talk about how to keep my self safe when using technology I can use a paint package to create a picture on screen.	I can talk about what happens when I use ICT. I can talk about how ICT is used. I can talk about how to keep my self safe when using technology.	I can enter and retreive work. I can use ICT to generate, amend and record my work. I can enter words into a word processor. I can use the backspace and delete keys. I can use a wordbank to create a sentence	I can enter and retrieve work. I can use ICT to generate, amend and record my work. I can enter words into a word processor. I can use the backspace and delete keys. I can use a word bank to create a sentence
F. Suggested programmes/hardware	Hardware: Bee Bots and other programmable toys. Software:	Hardware: iPads Software: Paint Movie maker	Hardware: PCs/ iPads Software: Paint Word	Software : Internet PowerPoint	Software : PowerPoint	Software : PowerPoint

G. Cross Curricular Links (Core non-negotiable standards)	Apps: Begot App for iPad Literacy Maths	Apps: I-Movie Literacy Maths	PowerPoint Apps: Software Literacy Maths	Literacy Maths	Literacy: writing/storytelling Maths	Literacy Maths
H. E-Safety Taken from SWGfl Digital Literacy and Citizenship		Hectors World: CEOP	E Safety: Safer Internet Day http://www.saferinternetd ay.org/web/	E Safety: link to browsing the internet Going Places Safely ABC Searching	Going Places Safely Digi duck e-book	
I. Assessment Pathway	I can use a range of programmable toys, Beebot, cars etc. I can create a simple program. I can describe an algorithm in simple terms. I can programme a simple programmable toy, e.g. Move the Beebot backwards and forwards. (Level 1)	I can use ICT to generate, amend and record my work. I can use simple interactive computer programs. (Level 1/2)	I can talk about how to keep myself safe when using technology. I can use a paint package to create a picture on screen. (Level 1)	I can talk about what happens when I use ICT. I can talk about how ICT is used. I can talk about how to keep myself safe when using technology (Level 1)	I can enter and retrieve work. I can use ICT to generate, amend and record my work. I can enter words into a word processor. I can use the backspace and delete keys. I can use a word bank to create a sentence (Level 2)	I can enter and retrieve work. I can use ICT to generate, amend and record my work. I can enter words into a word processor. I can use the backspace and delete keys. I can use a word bank to create a sentence (Level 2)

Year Group	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
2 – Unit Title	We are Astronauts –	We are Game Testers –	We are Photographers	We are Researchers –	We are Detectives –	We are Zoologists –
	Programming on screen	Exploring how computer	 Taking better photos 	Researching a topic	Collecting clues	Collecting data about
		games work				bugs
A. Nat Curriculum 14	Computer Science	Computer Science	Digital Literacy	Information Technology	Information Technology	Digital Literacy
				Digital Literacy	Digital Literacy	
	Understand what	Understand what	Use technology			Use technology
	algorithms are; how they	, , , ,	purposefully to create,	Use technology	Use technology	purposefully to create,
	are implemented as	are implemented as	organise, store, manipulate	purposefully to create,	purposefully to create,	organise, store, manipulate
	programs on digital	programs on digital	and retrieve digital content	organise, store, manipulate	organise, store, manipulate	and retrieve digital content
	devices; and that programs	devices; and that programs	Recognise common uses of	and retrieve digital content	and retrieve digital content	Recognise common uses of
	execute by following	execute by following	technology beyond school	Recognise common uses of	Recognise common uses of	technology beyond school
	precise and unambiguous instructions	precise and unambiguous instructions	,	technology beyond school	technology beyond school]
	instructions	Ilistructions	Use technology safely and			Use technology safely and
	Create and debug simple	Use logical reasoning to	respectfully, keeping	Use technology safely and	Harakashashasa safal sasal	respectfully, keeping
	programs	predict the behaviour of	personal information	respectfully, keeping	Use technology safely and	personal information
		simple programs.	private; identify where to	personal information	respectfully, keeping personal information	private; identify where to go for help and support
	Use logical reasoning to		go for help and support	private; identify where to	private; identify where to	when they have concerns
	predict the behaviour of	Recognise common uses of	when they have concerns	go for help and support	go for help and support	about content or contact
	simple programs.	technology beyond school	about content or contact	when they have concerns	when they have concerns	on the internet or other
		lles technology sofely and	on the internet or other	about content or contact	about content or contact	online technologies.
		Use technology safely and respectfully, keep personal	online technologies.	on the internet or other online technologies.	on the internet or other	
		information private, know		offillie technologies.	online technologies.	
		where to go for help and				
		support if they have				
		concerns about				
		contact/content on the				
		internet or other online				
		technologies				
B. Academy Aims Link	Accelerating and sustaining	Accelerating and sustaining	Accelerating and sustaining	Ensuring children are	Ensuring children are	Accelerating and sustaining
 SSCA 	children's progress towards	children's progress towards	children's progress towards	equipped for the next	equipped for the next	children's progress towards
 ADMAT 	higher achievement.	higher achievement.	higher achievement.	phase of learning.	phase of learning.	higher achievement.
	Facusian achieven ach acus	Facuriar askin amount assa	Facuria a selicular act acces	Cuastina an aniamable and	Cuanting on animodule and	Farming asking and and
	Ensuring achievement gaps for disadvantaged children	Ensuring achievement gaps for disadvantaged children	Ensuring achievement gaps for disadvantaged children	Creating an enjoyable and creative curriculum that	Creating an enjoyable and creative curriculum that	Ensuring achievement gaps for disadvantaged children
	are addressed.	are addressed.	are addressed.	meets the learning needs	meets the learning needs	are addressed.
	are addressed.	are addressed.	are addressed.	of children.	of children.	are addressed.
	Creating an enjoyable and	Ensuring children are	Ensuring children are	or conduction.	or candical.	Ensuring children are
	creative curriculum that	equipped for the next	equipped for the next	Safe and Strong – to have a	Safe and Strong – to have a	equipped for the next
	meets the learning needs	phase of learning.	phase of learning.	healthy body and mind.	healthy body and mind.	phase of learning.
	of children.			, , ,	, , ,	
		Creating an enjoyable and	Creating an enjoyable and	Self-confident – to have	Self-confident – to have	Creating an enjoyable and
	Skilled – to have learning	creative curriculum that	creative curriculum that	high self-esteem and self-	high self-esteem and self-	creative curriculum that
	skills for the modern world.	meets the learning needs	meets the learning needs	confidence.	confidence.	meets the learning needs
	Skills for the modern world.	meets the learning needs	meets the learning needs	confidence.	confidence.	meets the learning nee

	Safe and Strong – to have a healthy body and mind.	of children. Skilled – to have learning skills for the modern world.	of children. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms	Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world.	Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms	of children. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms
C. Scheme Reference Rising Stars ' Switched on Computing'	Programming	Computational Thinking	Creativity	Computer Network	Communication and Collaboration	Productivity
D. Key Knowledge	Understand what algorithms are, how they are implemented on digital devices. Programs execute by following precise and unambiguous instructions. Create and debug simple programs	Create and debug simple programs Programs execute by following precise and unambiguous instructions. Use logical reasoning to predict the behaviour of simple programs.	Use technology purposefully to create digital content Recognise common uses of technology beyond school Use technology safely and respectfully	Use technology safely and respectfully know where to go for help and support if they have concerns about contact/content on the internet or other online technologies	Use technology safely and respectfully, keep personal information private, know where to go for help and support if they have concerns about contact/content on the internet or other online technologies	Recognise common uses of technology beyond school Use technology purposefully Recognise common uses of technology beyond school
E. Key Skills and Understanding Ref: The Saints Way: Church of England MAT	I can describe an algorithm in increasing detail. I can debug a simple program. I can predict the the behaviour of a simple program (Level 2)	I can debug a simple program. I can plan and give instructions to devices. I can use an increasing range of computer programs (Level 2)	I can talk about how to keep myself safe when using technology. I can use ICT to organise and present information. I can talk about the use of ICT in and out of school. I can talk about the steps to take if I am concerned or need help	I can use a search engine to locate information. I can use ICT to find information, e.g search a CD ROM using key words or a menu, using a search engine. (Level 3)	I can send, receive and reply to e-mails. I can select and use a range of software to collect and present data and information (Level 3)	I can select and use a range of software to collect and present data and information. I can use ICT to find information. I can enter data into a simple database (Level 3)
F. Suggested programmes/hardware	Lightbot APP Scratch Kodu	Scratch Screencast-o-matic	Picasa Web Pixlr.com	Internet PowerPoint	Email Excel	Excel Photo Gallery Google Maps Google earth

G. Cross Curricular Links (Core non-negotiable standards)	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths
H. E-Safety Taken from SWGfl Digital Literacy and Citizenship	E Safety What is real? (this will be followed up in the email unit)	E Safety Lee and Kim: CEOP: Learning that Avatars are controlled by real people. Guy Fawkes Shares personal information over the internet and gets into trouble	E Safety: Safer Internet Day http://www.saferinternetd ay.org/web/	E Safety Link to browsing on the internet Hectors World (CEOP) Using Key words Finding and Identifying Appropriate online content Subject category searching	E Safety Sending email My online Neighbourhood Netssmart E-Book about Webster Sharing Personal information	E Safety Going Places Safely Smartie the Penguin
I. Assessment Pathway	I can describe an algorithm in increasing detail. I can debug a simple program. I can predict the behaviour of a simple program (Level2)	I can debug a simple program. I can plan and give instructions to devices. I can use an increasing range of computer programs (Level2)	I can talk about how to keep myself safe when using technology. I can use ICT to organise and present information. I can talk about the use of ICT in and out of school. (Level2) I can talk about the steps to take if I am concerned or need help. (Level 3)	I can use ICT to generate, amend and record my work. I can enter words into a word processor. I can use the backspace and delete keys. I can use a wordbank to create a sentence. (Level 2) I can use ICT to save information. I can use a search engine to locate information. I can use ICT to find information, e.g search a CD ROM using key words or a menu, using a search engine. (Level 3)	I can use ICT to organise and present information. I can talk about the use of ICT in and out of school. I can talk about the steps to take if I am concerned or need help. (Level 2) I can select and use a range of software to collect and present data and information, (level 3)	I can select and use a range of software to collect and present data and information. I can use ICT to find information. (Level 2) I can enter data into a simple database. (Level 3)

Year Group	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
3 – Unit Title	We are Programmers –	We are Bug Fixers –	We are Presenters –	We are Network	We are Communicators –	We are Opinion
	Programming an	Finding and correcting	Videoing performance	Engineers – Exploring	Communicating safely on	Pollsters – collecting
	animation	bugs in programs		computer networks	the internet	and analysing data
				including the internet		
A. Nat Curriculum 14	Computer Science	Computer Science	Digital Literacy	Information technology	Digital Literacy	Information
	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use sequence in programs; work with variables and various forms of input and output Use logical reasoning to detect and correct errors in algorithms and programs Select, use and combine a variety of software to design and create content that accomplish(es) given goals, including presenting information	Debug programs that accomplish specific goals Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Work with variables and various forms of input and output Use technology safely, respectfully and responsibly	Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
B. Academy Aims Link SSCA ADMAT	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps	Accelerating and sustaining children's progress towards higher achievement.	Accelerating and sustaining children's progress towards higher achievement.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for	Accelerating and sustaining children's progress towards higher achievement.
	for disadvantaged children are addressed.	Ensuring achievement gaps for disadvantaged children are addressed.	Ensuring achievement gaps for disadvantaged children are addressed.	for disadvantaged children are addressed.	disadvantaged children are addressed.	Ensuring achievement gaps for disadvantaged children are addressed.
	Ensuring children are equipped for the next phase	Ensuring children are equipped for the next	Ensuring children are equipped for the next	Ensuring children are equipped for the next phase	Ensuring children are equipped for the next phase of learning.	Ensuring children are equipped for the next

	of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills.	phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills.	phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills.	of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills.	Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world.	phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with
	Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	Soaring Stars – to have a love of life in all its forms.	good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.
C. Scheme Reference Rising Stars 'Switched on Computing'	Programming	Computational Thinking	Creativity	Computer Network	Communication and Collaboration	Productivity
D. Key Knowledge	Use sequence, selection and repetition in programs	Design, write and debug programs	Select, use and combine a variety of software (including internet services) on a range of digital devices	Use search technologies effectively	Understand computer networks including the internet Use technology safely, respectfully and responsibly	Select, use and combine a variety of software to design and create a range of programs, systems and content
E. Key Skills and Understanding Ref: The Saints Way: Church of England MAT	I can describe an algorithm in increasing detail. I can debug a simple program.	I can talk about how to keep my-self safe when using technology (Level 2)	I can talk about the use of ICT in and out of school. (Level 2)	I can use search technology effectively and safely.	I can talk about the steps to take if I am concerned or need help. (Level 2)	I can enter data into a simple database. I can use a spreadsheet to produce a table of

	I can predict the behaviour of a simple program. (Level 2) I can describe how an algorithm works. I can design, write and debug a program linked to specific goals. I can work with programs that involve sequence, selection, and repetition. I can describe ways of ensuring safe use of technology (Level 3)	I can debug a simple program. (Level 2) I can design, write and debug a program linked to specific goals (Level 3)	I can talk about and give reasons for the use of ICT in the wider world (Level 3) I can talk about the steps to take if I am concerned or need help. (Level 2)		I can use ICT to share and exchange ideas. I can talk about and give reasons for the use of ICT in the wider world. I can send, receive and reply to e-mails. (Level 3)	data. (Level 3)
F. Suggested programmes/hardware	Software: Scratch PowerPoint Apps: Hopscotch	Software: Scratch PowerPoint Apps:	Software: Movie Maker Apps: I-Movie	Software: Access to school network and command prompt	Software: Email Video Conf Presentation software Apps: FaceTime?	Software: Excel Word Apps: Safari
G. Cross Curricular Links (Core non-negotiable standards)	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths- data handling
H. E-Safety Taken from SWGfl Digital Literacy and Citizenship	E Safety Keep it private	E Safety Anti-bullying week: Cyberbullying: Screen out the Mean Kidscape advise Beatbullying resources	E Safety: Safer Internet Day Keep it Private: ROAR poster: Online life FLAT STANLEY: sharing photos and videos E Safety http://www.saferinternetday.org/web/	E Safety My online community	E Safety: Communicating safely on the internet Finding and Identifying Appropriate online content Subject category searching Writing good emails Sharing Personal Information Show on line respect Cyber cafe	E Safety
I. Assessment Pathway	I can describe an algorithm in increasing detail. I can debug a simple program. I can predict the behaviour of a simple program. (Level 2) I can describe how an algorithm works.	I can talk about how to keep my-self safe when using technology (Level 2) I can debug a simple program. (Level 2) I can design, write and	I can talk about how to keep my-self safe when using technology (Level 2) I can talk about the use of ICT in and out of school. (Level 2) I can use ICT to share and	I can use search technology effectively and safely. I can describe ways of ensuring safe use of technology. (Level 3)	I can use ICT to share and exchange ideas. I can talk about and give reasons for the use of ICT in the wider world. I can send, receive and reply to e-mails. (Level 3)	I can enter data into a simple database. I can use a spreadsheet to produce a table of data. (Level 3)

I can design, write and debug a program linked to specific goals. I can work with programs that involve sequence, selection, and repetition. I can describe ways of ensuring safe use of	debug a program linked to specific goals (Level 3)	exchange ideas. I can talk about and give reasons for the use of ICT in the wider world (Level 3)		
technology (Level 3)				

Year Group	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
4 – Unit Title	We are Software Developers – Developing a simple educational game	We are Toy Designers – Prototyping and interactive toy	We are Musicians – Producing digital music	We are HTML Editors – Editing and writing HTML	We are Co-authors – Producing a wiki	We are Meteorologists – Presenting the weather
A. Nat Curriculum 14	Computer Science Design, write and debug programs that accomplish specific goals Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Computer Science Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Information technology Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Be discerning in evaluating digital content Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour	Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Digital Literacy Solve problems by decomposing them into smaller parts Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Use search technologies effectively Use a variety of software (including internet services) on a range of digital devices to create content including presenting information Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Information technology Work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
B. Academy Aims Link SSCA	Accelerating and sustaining children's	Accelerating and sustaining children's	Accelerating and sustaining children's progress towards	Accelerating and sustaining children's progress towards	Accelerating and sustaining children's progress towards	Accelerating and sustaining children's

• ADMAT	progress towards higher achievement.	progress towards higher achievement.	higher achievement.	higher achievement.	higher achievement.	progress towards higher achievement.
	mgner demevement.	demevement.	Ensuring achievement gaps for	Ensuring achievement gaps for	Ensuring achievement gaps for	ingher demevement.
	Ensuring achievement	Ensuring achievement	disadvantaged children are	disadvantaged children are	disadvantaged children are	Ensuring achievement
	gaps for disadvantaged	gaps for disadvantaged	addressed.	addressed.	addressed.	gaps for disadvantaged
	children are addressed.	children are addressed.	add. cooca.	audi esseui	audi esseui	children are addressed.
			Ensuring children are equipped	Ensuring children are equipped	Ensuring children are equipped	
	Ensuring children are	Ensuring children are	for the next phase of learning.	for the next phase of learning.	for the next phase of learning.	Ensuring children are
	equipped for the next	equipped for the next				equipped for the next
	phase of learning.	phase of learning.	Creating an enjoyable and	Creating an enjoyable and	Creating an enjoyable and	phase of learning.
			creative curriculum that meets	creative curriculum that meets	creative curriculum that meets	,
	Creating an enjoyable	Creating an enjoyable	the learning needs of children.	the learning needs of children.	the learning needs of children.	Creating an enjoyable
	and creative curriculum	and creative curriculum				and creative curriculum
	that meets the learning	that meets the learning	Providing for children a safe,	Providing for children a safe,	Providing for children a safe,	that meets the learning
	needs of children.	needs of children.	stimulating, caring but	stimulating, caring but	stimulating, caring but	needs of children.
			challenging learning	challenging learning	challenging learning	
	Providing for children a	Providing for children a	environment.	environment.	environment.	Providing for children a
	safe, stimulating, caring	safe, stimulating, caring				safe, stimulating, caring
	but challenging	but challenging learning	Safe and Strong – to have a	Safe and Strong – to have a	Safe and Strong – to have a	but challenging learning
	learning environment.	environment.	healthy body and mind.	healthy body and mind.	healthy body and mind.	environment.
			, ,	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	
	Safe and Strong – to	Safe and Strong – to	Self-confident – to have high	Self-confident – to have high	Self-confident – to have high	Safe and Strong – to
	have a healthy body	have a healthy body and	self-esteem and self-	self-esteem and self-	self-esteem and self-	have a healthy body
	and mind.	mind.	confidence.	confidence.	confidence.	and mind.
	Self-confident – to have	Self-confident – to have	Socially aware – to be global	Socially aware – to be global	Socially aware – to be global	Self-confident – to have
	high self-esteem and	high self-esteem and	citizens with good social skills.	citizens with good social skills.	citizens with good social skills.	high self-esteem and
	self-confidence.	self-confidence.	_	-	_	self-confidence.
			Skilled – to have learning skills	Skilled – to have learning skills	Skilled – to have learning skills	
	Socially aware – to be	Socially aware – to be	for the modern world.	for the modern world.	for the modern world.	Socially aware – to be
	global citizens with	global citizens with good				global citizens with
	good social skills.	social skills.	Soaring Stars – to have a love of	Soaring Stars – to have a love	Soaring Stars – to have a love	good social skills.
			life in all its forms.	of life in all its forms.	of life in all its forms.	
	Skilled – to have	Skilled – to have				Skilled – to have
	learning skills for the	learning skills for the				learning skills for the
	modern world.	modern world.				modern world.
	Soaring Stars – to have	Soaring Stars – to have a				Soaring Stars – to have
	a love of life in all its	love of life in all its				a love of life in all its
	forms.	forms.				forms.
C. Scheme Reference	Programming	Computational Thinking	Creativity	Computer Network	Communication and	Productivity
Rising Stars 'Switched on					Collaboration	
Computing'						
D. Key Knowledge	Work with variables	Use sequence, selection	Select, use and combine a	Understand computer	Use a variety of software	Use search
	and various forms of	and repetition in	variety of software (including	networks including the	(including internet services) to	technologies
	input and output	programs	internet services) on a range of	internet; how they can provide	create content including	effectively, appreciate
	1	l	digital devices to design and	multiple services, such as the	presenting information	how results are

F. Vay Chille and	Lean describe how as	Lean describe how an	create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	world-wide web; and the opportunities they offer for communication and collaboration	Lean use ICT to save	selected and ranked, and be discerning in evaluating digital content
E. Key Skills and Understanding Ref: The Saints Way: Church of England MAT	I can describe how an algorithm works. I can design, write and debug a program linked to specific goals. I can work with programs that involve sequence, selection, and repetition. I can describe ways of ensuring safe use of technology (Level 3) I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can describe how an algorithm works. I can design, write and debug a program linked to specific goals. I can work with programs that involve sequence, selection, and repetition. I can describe ways of ensuring safe use of technology (Level 3)	I can use ICT to save information. I can use a search engine to locate information. I can use ICT to find information, e.g search a CD ROM using key words or a menu, using a search engine. I can select and use a range of software to collect and present data and information, e.g. Word, Publisher. (Level 3)	I can use ICT to share and exchange ideas. I can talk about and give reasons for the use of ICT in the wider world. I can send, receive and reply to e-mails. I can use search technology effectively and safely. (Level 3)	I can use ICT to save information. I can use a search engine to locate information. I can use ICT to find information, e.g search a CD ROM using key words or a menu, using a search engine. I can select and use a range of software to collect and present data and information, e.g. Word, Publisher. (Level 3)	I can use a graphics package to create a picture. I can combine graphics with text. I can program a sequence of instructions to control a device. I can use ICT to gather physical data. I can enter data into a simple database. I can use a spreadsheet to produce a table of data. (Level 3)
F. Suggested programmes/hardware	Software: Scratch Snap! Apps: a.l.e.x	Software: Scratch Apps:	Software: Audacity Apps: Garage band	Software: FireFox Brackets Apps: Safari	Software: Learning Platform Apps: Safari Wikpedia	Software: Excel PowerPoints Apps:
G. Cross Curricular Links (Core non-negotiable standards)	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths
H. E-Safety	E Safety	E Safety	E Safety: Safer Internet Day	E Safety	E Safety: My Online	E Safety

Taken from SWGfl Digital Literacy and Citizenship		Anti-bullying week: Cyberbullying Screen out the Mean Cyberbullying Kidscape advise Beat bullying resources Positive online communications Keep It Private: ROAR Educate Poster: online identity and strong passwords	http://www.saferinternetday.org/web/	Using Keywords: Finding and Identifying Appropriate Content ROAR Educate: Searching on line.	Community ROAR poster: Online life FLAT STANLEY: sharing photos and videos Follow the Digital Trail ROAR Educate poster: privacy and posting Show on line respect Cyber cafe	Things for Sale: Media Smart Digital Adwise (Literacy link to adverts)
I. Assessment Pathway	I can describe how an algorithm works. I can design, write and debug a program linked to specific goals. I can work with programs that involve sequence, selection, and repetition. I can describe ways of ensuring safe use of technology (Level 3)	I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can use ICT to save information. I can use a search engine to locate information. I can use ICT to find information, e.g search a CD ROM using key words or a menu, using a search engine. I can select and use a range of software to collect and present data and information, e.g. Word, Publisher. (Level 3)	I can use ICT to share and exchange ideas. I can talk about and give reasons for the use of ICT in the wider world. I can send, receive and reply to e-mails. I can use search technology effectively and safely. (Level 3)	I can use 'and' and 'or' when searching the Internet. I can use ICT to interpret findings and answer questions, e.g. Data Loggers. I can use ICT to save information. I can select, use and combine a range of software to collect, evaluate and present data and information, e.g. Word, Publisher Excel. (Level 4)	I can use a graphics package to create a picture. I can combine graphics with text. I can program a sequence of instructions to control a device. I can use ICT to gather physical data. I can enter data into a simple database. I can use a spreadsheet to produce a table of data. (Level 3)

Year Group	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
5 – Unit Title	We are Game	We are Cryptographers	We are Artists – Fusing	We are Web Designers –	We are Bloggers -	We are Architects –
	Developers –	 Cracking codes 	geometry and art	Creating a website about	Sharing experiences and	Creating a virtual space
	Developing an			cyber safety	opinions	
	interactive game					
A. Nat Curriculum 14	Computer Science	Computer Science	Information technology Computer Science	Digital Literacy	Digital Literacy	Digital Literacy
	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms/ programs Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. Be discerning in evaluating digital content	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

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	Accelerating and	Accelerating and sustaining	Accelerating and sustaining	Accelerating and sustaining	Accelerating and sustaining	Accelerating and sustaining
B. Academy Aims Link	sustaining children's	children's progress	children's progress towards	children's progress towards	children's progress	children's progress towards
• SSCA	progress towards	towards higher	higher achievement.	higher achievement.	towards higher	higher achievement.
ADMAT	higher achievement.	achievement.			achievement.	
7.5.00			Ensuring achievement gaps	Ensuring achievement gaps for		Ensuring achievement gaps
	Ensuring achievement	Ensuring achievement gaps	for disadvantaged children	disadvantaged children are	Ensuring achievement gaps	for disadvantaged children
	gaps for disadvantaged	for disadvantaged children	are addressed.	addressed.	for disadvantaged children	are addressed.
	children are addressed.	are addressed.			are addressed.	
			Ensuring children are	Ensuring children are equipped		Ensuring children are
	Ensuring children are	Ensuring children are	equipped for the next phase	for the next phase of learning.	Ensuring children are	equipped for the next
	equipped for the next	equipped for the next	of learning.	for the next phase of learning.	equipped for the next	phase of learning.
	phase of learning.	phase of learning.	or learning.	Constitute on animorphic and	phase of learning.	priase of learning.
	phase of learning.	priase of learning.	Constitution	Creating an enjoyable and	priase of learning.	Caratian and a sign of the said
			Creating an enjoyable and	creative curriculum that meets		Creating an enjoyable and
	Creating an enjoyable	Creating an enjoyable and	creative curriculum that	the learning needs of children.	Creating an enjoyable and	creative curriculum that
	and creative curriculum	creative curriculum that	meets the learning needs of		creative curriculum that	meets the learning needs
	that meets the learning	meets the learning needs	children.	Providing for children a safe,	meets the learning needs	of children.
	needs of children.	of children.		stimulating, caring but	of children.	
			Providing for children a safe,	challenging learning		Providing for children a
	Providing for children a	Providing for children a	stimulating, caring but	environment.	Providing for children a	safe, stimulating, caring
	safe, stimulating, caring	safe, stimulating, caring	challenging learning		safe, stimulating, caring	but challenging learning
	but challenging	but challenging learning	environment.	Safe and Strong – to have a	but challenging learning	environment.
	learning environment.	environment.		healthy body and mind.	environment.	
	icarring crivil criment.		Safe and Strong – to have a	nearthy body and minu.		Safe and Strong – to have a
	Safe and Strong – to	Safe and Strong – to have a	healthy body and mind.	Self-confident – to have high	Safe and Strong – to have a	healthy body and mind.
	have a healthy body	healthy body and mind.	healthy body and mind.	self-esteem and self-	healthy body and mind.	healthy body and mind.
	and mind.	Healthy body and mind.	Colf confident to have high	confidence.	Healthy body and mind.	Self-confident – to have
	and minu.	Calf agatidant to barre	Self-confident – to have high self-esteem and self-	confidence.	Calf assetidant to base	
	Calf and Calant to be a	Self-confident – to have		Cardally assessed to be alabat	Self-confident – to have	high self-esteem and self-
	Self-confident – to have	high self-esteem and self-	confidence.	Socially aware – to be global	high self-esteem and self-	confidence.
	high self-esteem and	confidence.		citizens with good social skills.	confidence.	
	self-confidence.		Socially aware – to be global			Socially aware – to be
		Socially aware – to be	citizens with good social	Skilled – to have learning skills	Socially aware – to be	global citizens with good
	Socially aware – to be	global citizens with good	skills.	for the modern world.	global citizens with good	social skills.
	global citizens with	social skills.			social skills.	
	good social skills.		Skilled – to have learning	Soaring Stars – to have a love		Skilled – to have learning
		Skilled – to have learning	skills for the modern world.	of life in all its forms.	Skilled – to have learning	skills for the modern world.
	Skilled – to have	skills for the modern			skills for the modern	
	learning skills for the	world.	Soaring Stars – to have a love		world.	Soaring Stars – to have a
	modern world.		of life in all its forms.			love of life in all its forms.
		Soaring Stars – to have a			Soaring Stars – to have a	
	Soaring Stars – to have	love of life in all its forms.			love of life in all its forms.	
	a love of life in all its	love of the in all its forms.			love of file in all its forfils.	
	forms					
	1011113					
C. Scheme Reference	Programming	Computational Thinking	Creativity	Computer Networks	Communication and	Productivity
Rising Stars 'Switched on					Collaboration	
Computing'						
D. Key Knowledge	Design, write and	Use logical reasoning to	Use sequence, selection, and	Understand computer	Understand computer	Use search technologies
- ney knowledge	0,		TTT TSQUELIES, SCIESCION, UNIO	The stand compare.	The state of the s	

	debug programs that accomplish specific goals	explain how some simple algorithms work	repetition in programs	networks including the internet Select, use and combine a variety of software to design and create a range of programs	networks including the internet Select, use and combine a variety of software to design and create a range of content that accomplishes given goals	effectively Select, use and combine a variety of software (including internet services) to design and create a range of programs, systems and content that accomplish given goals
E. Key Skills and Understanding Ref: The Saints Way: Church of England MAT	I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can use ICT to save information. I can use 'and' and 'or' when searching the Internet. I can exchange information with others in a range of different ways, e.g. e-mail, blog, Skype I can send text and images as attachments. I can describe the way in which search results are selected and ranked. (Level 4)	I can exchange information with others in a range of different ways, e.g. e-mail, blog, Skype I can send text and images as attachments. I can describe the way in which search results are selected and ranked. (Level 4)	I can use ICT to interpret findings and answer questions, e.g. Data Loggers. I can use a graphics package to develop and refine an image. I can use a multimedia package to produce a set of linked pages that include images, sound and text. I can choose an appropriate sensor to monitor environmental conditions and changes. I can gather and enter data into a data-handling package. I can use a spreadsheet to carry out calculations. I can select, use and combine a range of software to collect, evaluate and present data and information, e.g. Word, Publisher Excel. (Level 4)
F. Cross Curricular Links (Core non-negotiable	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths
G. Suggested programmes/hardware	Software: Scratch Kodu Coda Bal APP	Software: Scratch	Software: Scratch	Software: Google	Software: Blogger Learning Platform	Software: Screencast-o-mat
H. E-Safety	E Safety	E Safety	E Safety: Safer Internet Day	E Safety	E Safety:	E Safety :Privacy Rules

Taken from SWGfl Digital Literacy and Citizenship		Anti-bullying week: Cyberbullying Rings of responsibility: Videos: pause before you post Power of words: Cyberbullying Online symbols Let's fight it together: cyberbullying film	http://www.saferinternetday .org/web/ Think you know Jigsaw: Becky's Story	Powerful Passwords Password Rap Horrible Histories How secure if my password? Cyber safety: Cyberbullying Choosing a good search site: BBC Website on searching Right sites: Don't be fooled	Positive online communications Safe on line talk Sharing Personal Information CEOP: Cyber café: chat activity	Cybernetrix
I. Assessment Pathway	I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can use ICT to save information. I can use 'and' and 'or' when searching the Internet. I can exchange information with others in a range of different ways, e.g. e-mail, blog, Skype I can send text and images as attachments. I can describe the way in which search results are selected and ranked. (Level 4)	I can exchange information with others in a range of different ways, e.g. e-mail, blog, Skype I can send text and images as attachments. I can describe the way in which search results are selected and ranked. (Level 4)	I can use ICT to interpret findings and answer questions, e.g. Data Loggers. I can use a graphics package to develop and refine an image. I can use a multimedia package to produce a set of linked pages that include images, sound and text. I can choose an appropriate sensor to monitor environmental conditions and changes. I can gather and enter data into a data-handling package. I can use a spreadsheet to carry out calculations. I can select, use and combine a range of software to collect, evaluate and present data and information, e.g. Word, Publisher Excel. (Level 4)

B. Academy Aims SSCA ADMAT	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Safe and Strong — to have a healthy body and mind. Self -confident — to have high self -esteem and self - confidence. Socially aware — to be global citizens with good social skills. Skilled — to have learning skills for the modern world.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Safe and Strong — to have a healthy body and mind. Self-confident — to have high self-esteem and self-confidence. Socially aware — to be global citizens with good social skills. Skilled — to have learning skills for the modern world.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern
C. Scheme Reference Rising Stars 'Switched on	world. Computer Networks	Computational Thinking	Communication and Collaboration	Productivity	Programming	world. Creativity
D. Key Knowledge	Understand computer networks including the internet Use search technologies	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of	Select, use and combine a variety of software to design and create a range of programs, systems and content that accomplish given goals	Design, write and debug programs that accomplish specific goals Use sequence, selection,	Design, write and debug programs that accomplish specific goals Use sequence, selection,	Understand computer networks including the internet Select, use and combine
	effectively	programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and	Use technology safely, respectfully and responsibly	and repetition in programs	and repetition in programs Use logical reasoning to explain how some simple	a variety of software Use technology safely, respectfully and responsibly

		information			algorithms work	
		Use technology safely, respectfully and responsibly				
E. Key Skills and Understanding Ref: The Saints Way: Church of England MAT	I can use a multimedia package to refine and present a series of linked pages. I can use 'and', 'or', and quotation marks when searching the Internet. I can use a range of online resources to inform my work. I can talk about the effects of changing variables when using an ICT model. (Level 5)	I can use an objects based graphics package. I can use a multimedia package to refine and present a series of linked pages. I can develop and search a branching database. I can use spreadsheet to test predictions and theories. (Level 5)	I can use 'and', 'or', and quotation marks when searching the Internet. I can choose the most effective method for sharing and communicating information. I can send e-mails to multiple recipients, with attachments where appropriate. I can evaluate my use of ICT and identify improvements that could be made. (Level 5)	I can detect and correct errors in algorithms and programs. I can design, write and debug programs, by deconstructing a problem. I can work with programs that involve various forms of input and output. I can use a range of systems to report concerns and inappropriate behaviour (Level 5)	I can detect and correct errors in algorithms and programs. I can design, write and debug programs, by deconstructing a problem. I can work with programs that involve various forms of input and output. I can use a range of systems to report concerns and inappropriate behaviour. (Level 5)	I can select, use and combine a range of software to collect, analyse, evaluate and present data and information, e.g. Word, Publisher, Powerpoint and Excel. I can use a multimedia package to refine and present a series of linked pages. (Level 5)
F. Cross Curricular Links (Core non-negotiable standards)	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths
G. Suggested programmes/hardware	Software: Prezi Apps: APP inventor	Apps: Google Apps for education	Software: Movie Maker Apps: I-Movie	Software: PowerPoint	Apps: App Inventor Python APP Scratch Junior	Software: Movie Maker Publisher
H. E-Safety Taken from SWGfl Digital Literacy and Citizenship	E Safety Choosing a Search site: Appropriate online content	E Safety Anti-bullying week: Cyberbullying Rings of responsibility: www.digizen.org: digital values Videos: pause before you post Online symbols	E Safety: Safer Internet Day http://www.saferinternetday.o rg/web/ You've won a prize (spam) Horrible Histories	E Safety Writing good emails	E Safety Safe on line talk Positive online communications	Whose is it anyway? (plagiarism) Advertising Detectives: CyberQuoll: trying it on Media Smart: Digital Adwise
I. Assessment Pathway	I can use 'and', 'or', and quotation marks when searching the Internet. I can use a range of online resources to inform my work. I can select, use and combine a range of software to collect,	I can use an objects based graphics package. I can use a multimedia package to refine and present a series of linked pages. I can use sensors to monitor and measure external events. I can talk about the effects of changing variables when using	I can choose the most effective method for sharing and communicating information. I can send e-mails to multiple recipients, with attachments where appropriate. I can use my understanding of ranking to evaluate the digital content of search results.	I can detect and correct errors in algorithms and programs. I can design, write and debug programs, by deconstructing a problem. I can work with programs that involve various forms of input and output.	I can detect and correct errors in algorithms and programs. I can design, write and debug programs, by deconstructing a problem. I can work with programs that involve various	I can use 'and', 'or', and quotation marks when searching the Internet. I can use a range of online resources to inform my work. I can select, use and combine a range of software to collect,

analyse, evaluate and present data and information, e.g. Word, Publisher, Powerpoint and Excel.	an ICT model. I can develop and search a branching database. I can use spreadsheet to test predictions and theories.	I can evaluate my use of ICT and identify improvements that could be made.	I can use a range of systems to report concerns and inappropriate behaviour.	forms of input and output. I can use a range of systems to report concerns and inappropriate behaviour.	analyse, evaluate and present data and information, e.g. Word, Publisher, PowerPoint and Excel.
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